AMENDMENTS TO THE CLAIMS

1. (Currently amended): A method ~~for editing a multi-layer original image displayed on a display screen,~~ comprising:

in response to receiving an indication to edit a region of ~~said~~ an ~~original~~ image, distorting a predetermined portion of a first layer of ~~said original~~ the image to produce a distorted image for ~~said~~ the region~~, said distorted image including a magnified region having a magnification for said region at least partially surrounded by an at least partially compressed region where said magnification decreases to that of said original image to provide context for said magnified region with respect to said original image~~ having a magnification that is not uniform across the region;

overlaying ~~said~~the distorted image on ~~said region in~~ a second ~~undistorted~~ layer of ~~said original~~the image to produce an overlaid image for presentation ~~and displaying said overlaid image~~ on ~~said~~a display ~~screen to replace display of said original image, said distorted image at least partially surrounded by non-overlaid portions of said second undistorted layer in said overlaid image~~; and,

~~upon completion of editing of said overlaid image, selectively~~ propagating edits made to ~~said~~the first layer of the overlaid image through to one or more remaining ~~said second undistorted~~ layers of ~~said original~~the image.

2. (Currently amended): The method of claim 1 wherein ~~-said~~the distorting further includes:

-creating a lens surface for the distorted image; and,

transforming the predetermined portion of the first layer by applying a distortion function ~~to said portion of said first layer by displacing said portion onto said distortion function and projecting said displaced~~to define the lens surface to the predetermined portion ~~onto a plane~~of the first layer.

3. (Currently amended): The method of claim 2 wherein ~~said~~the ~~applying~~creating further includes displaying a graphical user interface (“GUI”) over ~~said~~the distorted image for ~~receiving one or more signals for~~ adjusting ~~said distortion function~~the lens surface.

4. (Currently amended): The method of claim 3 wherein ~~said~~the ~~distortion function~~lens surface includes a focal region ~~corresponding to said magnified region and having an elevation to provide said magnification upon said projecting onto said plane~~ and a ~~shoulder~~base region ~~corresponding to said compressed region where said elevation decreases to provide said decreasing magnification upon said projecting onto said plane~~ and ~~said~~the GUI includes ~~at least one of~~:

~~means~~ an icon for adjusting ~~said elevation and hence said~~ a magnification for the lens surface;

~~means~~ an icon for adjusting a degree of scooping ~~for said distortion function~~for the lens surface;

~~means~~ an icon for adjusting a~~n~~ ~~extent~~ size and a shape for ~~said~~the focal region;

~~means~~ an icon for adjusting a~~n~~ ~~extent~~ size and a shape for ~~said~~the ~~shoulder~~ base region;

~~means~~ an icon for adjusting a location for ~~said~~ the lens surface ~~distortion function~~ within ~~said~~ the first layer;

an icon for adjusting a location for the base region within the first layer;

or~~and~~,

~~means~~ an icon for adjusting a location for ~~said~~ the focal region relative to ~~said shoulder~~ the base region.

5. (Currently amended): The method of claim 4~~1~~ ~~and further comprising receiving a signal~~ wherein the GUI further supports at least one of an icon or a keyboard input for switching ~~among~~ between ~~said~~ the first and second layers.

6. (Currently amended): The method of claim 5~~1~~ ~~and further comprising receiving a signal~~ wherein the GUI further supports at least one of an icon or a keyboard input for selecting among ~~said~~ the first and second layers.

7. (Currently amended): The method of claim 6~~1~~ ~~and further comprising receiving a signal~~ wherein the GUI further supports at least one of an icon or a keyboard input for selecting a ~~folded distorted image in which said magnified region is repositioned~~folded lens surface.

8. (Currently amended): The method of claim 7 wherein ~~said~~ the folded ~~distorted image further~~ lens surface includes a second ~~magnified~~ focal region for ~~said region in~~ displaying a portion of ~~said~~ the second layer.

9. (Currently amended): The method of claim 8 wherein ~~said~~ the focal ~~magnified~~ region ~~in said~~ is folded ~~distorted region is repositioned by folding~~ away from an original position relative to ~~said~~ the ~~compressed region to accommodate said second magnified~~ base region.

10. (Currently amended): The method of claim 9 wherein ~~said~~ the second ~~magnified~~ focal region is located at ~~said~~ the original position ~~and wherein said second magnified region has said magnification~~.

11. (Currently amended): The method of claim 10 ~~and~~ wherein the GUI further ~~comprising~~ supports at least one of an icon or a keyboard input ~~receiving a signal~~ for selecting a user adjustable window for display ~~within said magnified~~ in the focal region.

12. (Currently amended): The method of claim 11 wherein ~~said~~ the window ~~displays~~ is configured to display a portion of ~~said~~ the second layer ~~at said magnification~~.

13. (Currently amended): The method of claim 4~~3~~ wherein ~~said~~ the adjusting is performed and the ~~one or more signals and said~~ indication ~~are~~ is generated responsive to an input to cause movement of a cursor on the display ~~with a pointing device~~.

14. (Currently amended): The method of claim 1 wherein ~~said~~ the first ~~and~~ or second layers are one or more of raster, vector, point, ~~and~~ or geo-referenced data layers.

15. (Currently amended): The method of claim_–1_–wherein ~~said~~ the indication, region, predetermined portion, first layer, distorted image, ~~and~~ or second layer includes a plurality of the indications, regions, predetermined portions, first layers, distorted images, ~~and~~ or second layers, respectively.

16. (Cancelled).

17. (Currently amended): The method of claim 1 and further comprising saving ~~said~~ the edits for subsequent recall and application.

18. (Currently amended): The method of claim 17 wherein ~~said~~ the edits are saved as bookmarks.

19. (Currently amended): The method of claim 18 wherein ~~said~~ the editing includes applying ~~said~~ the bookmarks.

20. (Currently amended): A method ~~for generating a presentation of a region of a multi-layer original image for display on a display screen,~~ comprising:

distorting a predetermined portion of a first layer of ~~said original~~ an image to produce a distorted image for ~~said~~ a region~~, said distorted~~ of the image ~~including a magnified region~~ having a magnification ~~for said region at least partially surrounded by an at least partially compressed region where said magnification decreases to that of said original image to provide context for said magnified region with respect to said original image~~ that is not uniform across the region; and,

overlaying ~~said~~ the distorted image on ~~said region in~~ a second ~~undistorted~~ layer of ~~said original~~ the image ~~to generate said~~ for presentation ~~, said distorted image at least partially surrounded by non-overlaid portions of said second undistorted layer in said presentation; and,~~

~~displaying said presentation~~ on ~~said~~ a display ~~screen~~.

21. (Currently amended): The method of claim 20 wherein ~~said~~ the distorting further includes:

creating a lens surface for the distorted image; and,

~~applying a distortion function to said~~ transforming the predetermined portion of ~~said~~ the first layer by ~~displacing said portion onto said~~ applying a distortion function ~~and projecting said displaced portion onto a plane~~ to define the lens surface to the predetermined portion of the first layer.

22. (Currently amended): The method of claim 21 wherein ~~said applying~~ the creating further includes displaying a graphical user interface ("GUI"~~)~~) ~~over said distorted image for receiving one or more signals for adjusting said distortion function~~to adjust the lens surface.

23. (Currently amended): The method of claim 22 wherein ~~said distortion function includes a focal region corresponding to said magnified region and having an elevation to provide said magnification upon said projecting onto said plane and a shoulder region corresponding to said compressed region where said elevation decreases to provide said decreasing magnification upon said projecting onto said plane and said~~ the lens surface includes a focal region and a base region and the GUI includes ~~at least one of~~:

~~means~~ an icon for adjusting ~~said elevation and hence said~~ a magnification for the lens surface;

~~means~~ an icon for adjusting a degree of scooping for ~~said distortion function~~ the lens surface;

~~means~~ an icon for adjusting ~~an extent for said~~ a size and shape for the focal region;

~~means~~ an icon for adjusting ~~an extent for said shoulder~~ a size and shape for the base region;

~~means~~ an icon for adjusting a location for ~~said distortion function~~ the lens surface within ~~said~~ the first layer;

~~means~~ an icon for adjusting a location for ~~an outline of said shoulder~~ the base region within ~~said~~ the first ~~layer; and~~layer; or,

~~means~~ an icon for adjusting a location for ~~said~~ the focal region relative ~~said shoulder~~ to the base region.

24. (Currently amended): The method of claim 23~~0~~ ~~and further comprising receiving a signal~~ wherein the GUI further supports at least one of an icon or a keyboard input for switching ~~among said~~ between the first and second layers.

25. (Currently amended): The method of claim 24~~0~~ ~~and further comprising receiving a signal~~ wherein the GUI further supports at least one of an icon or a keyboard input for selecting among first and second layers.

26. (Currently amended): The method of claim 25 ~~0 and further comprising receiving a signal for selecting a folded distorted image in which said magnified region is repositioned~~wherein the GUI further supports at least one of an icon or a keyboard input for selecting a folded lens surface.

27. (Currently amended): The method of claim 26 wherein ~~said~~ the folded lens surface ~~distorted image~~ includes a second ~~magnified~~ focal region for ~~said region in said~~ displaying a portion of the second layer.

28. (Currently amended): The method of claim 27 wherein ~~said magnified~~ the focal region ~~in said~~ is folded ~~distorted region is repositioned by folding~~ away from an original position relative to ~~said compressed region to accommodate said second magnified~~ the base region.

29. (Currently amended): The method of claim 28 wherein ~~said~~ the second ~~magnified~~ focal region is located at ~~said~~ the original position ~~and wherein said second magnified region has said magnification~~.

30. (Currently amended): The method of claim 29~~0~~ ~~and further comprising receiving a signal for selecting~~ wherein the GUI further supports at least one of an icon or a keyboard input for selecting a user adjustable window for display ~~with~~in ~~said magnified~~ the focal region.

31. (Currently amended): The method of claim 30 wherein ~~said~~ the window is configured to display ~~displays~~ a portion of ~~said~~ the second layer ~~at said magnification~~.

32. (Currently amended): The method of claim 23~~2~~ ~~wherein said one or more signals are generated with a pointing device~~wherein the adjusting is performed responsive to an input to cause movement of a cursor on the display.

33. (Currently amended): The method of claim 20 wherein ~~said~~ the first ~~and~~ or second layers are one or more of raster, vector, point, ~~and~~ or geo-referenced data layers.

34. (Currently amended): The method of claim 20 wherein ~~said~~ the indication, region, predetermined portion, first layer, distorted image, ~~and~~ or second layer includes a plurality of the indications, regions, predetermined portions, first layers, distorted images, ~~and~~ or second layers, respectively.

35. (Cancelled).

36. (New): A data processing system comprising:

a processor; and

memory comprising instructions that are executable on the processor to cause the data processing system to perform operations comprising:

in response to receiving an indication to edit a region of an image, distorting a predetermined portion of a first layer of the image to produce a distorted image for the region having a magnification that is not uniform across the region;

overlaying the distorted image on a second layer of the image to produce an overlaid image for presentation on a display; and

propagating edits made to the first layer of the overlaid image through to one or more remaining layers of the image.

37. (New): The data processing system of claim 36 wherein the distorting further includes:

creating a lens surface for the distorted image; and

transforming the predetermined portion of the first layer by applying a distortion function to define the lens surface to the predetermined portion of the first layer.

38. (New): The data processing system of claim 37 wherein the creating further includes displaying a graphical user interface ("GUI") over the distorted image for adjusting the lens surface.

39. (New): The data processing system of claim 38 wherein the GUI further supports at least one of an icon or a keyboard input for switching between the first and second layers.

40. (New): The data processing system of claim 39 wherein the GUI further supports at least one of an icon or a keyboard input for selecting the first of second layers.

41. (New): The data processing system of claim 40 wherein the GUI further supports at least one of an icon or a keyboard input for selecting a folded lens surface.

42. (New): The data processing system of claim 41 wherein the folded lens surface includes a second focal region for displaying a portion of the second layer.

43. (New): The data processing system of claim 42 wherein the focal region is folded away from an original position relative to the base region.

44. (New): The data processing system of claim 43 wherein the GUI further supports at least one of an icon or a keyboard input for selecting a user adjustable window for display in the focal region.

45. (New): The data processing system of claim 44 wherein the window displays a portion of the second layer.

46. (New): The data processing system of claim 36 and further comprising saving the edits for subsequent recall and application.

47. (New): The data processing system of claim 46 wherein the edits are saved as bookmarks and wherein the editing includes applying the bookmarks.

48. (New): One or more computer-readable media comprising instructions stored thereon that, responsive to execution by a data processing system, causes the data processing system to perform operations comprising:

in response to receiving an indication to edit a region of an image, distorting a predetermined portion of a first layer of the image to produce a distorted image for the region having a magnification that is not uniform across the region;

overlaying the distorted image on a second layer of the image to produce an overlaid image for presentation on a display; and

propagating edits made to the first layer of the overlaid image through to one or more remaining layers of the image.

49. (New): The one or more computer-readable media of claim 48, wherein the distorting further includes:

creating a lens surface for the distorted image; and

transforming the predetermined portion of the first layer by applying a distortion function to define the lens surface to the predetermined portion of the first layer.